



August 6, 2012

Ms. Shelia Desai
Remedial Project Manager
U.S. Environmental Protection Agency
77 West Jackson Boulevard (SR-6J)
Chicago, IL 60604

**Subject: Technical Review Comments on "Revised Remedial Investigation Report"
Plainwell Mill Site, Operable Unit 7 of
Allied Paper/Portage Creek/Kalamazoo River Site
Plainwell, Allegan County, Michigan
Remedial Action Contract (RAC) 2 No. EP-S5-06-02
Work Assignment No. 141-RSBD-059B**

Dear Ms. Desai:

SulTRAC has reviewed the above-referenced document as part of its oversight activities for the former Plainwell Mill Site in Plainwell, Allegan County, Michigan. The document is dated July 10, 2012, and was prepared by Conestoga-Rovers & Associates, Inc. (CRA), for Weyerhaeuser Company, the responsible party for the site.

SulTRAC reviewed the document to assess its technical adequacy because CRA had revised its RI report again (having discovered some calculation errors in its human health risk assessment included as part of the revised RI Report dated April 20, 2012). SulTRAC previously submitted review comments to EPA on May 24, 2012. SulTRAC's initial RI Report revision review comments still apply, in addition to these currently enclosed review comments on the most recent revision.

If you have any questions about this submittal, please call me at (312) 201-7491.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey J. Lifka".

Jeffrey Lifka, CHMM
Project Manager

Enclosure

cc: Parveen Vij, EPA Contracting Officer (letter only)
Mindy Gould, SulTRAC Program Manager
David Homer, SulTRAC Ecological Risk Assessor
Ray Mastrolonardo, P.G., SulTRAC Geologist
Eric Morton, SulTRAC Human Health Risk Assessor
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ENCLOSURE

**TECHNICAL REVIEW COMMENTS ON
“REVISED REMEDIAL INVESTIGATION REPORT”
PLAINWELL MILL SITE, OPERABLE UNIT 7 OF
ALLIED PAPER/PORTAGE CREEK/KALAMAZOO RIVER SITE
PLAINWELL, ALLEGAN COUNTY, MICHIGAN**

(Four Pages)

**TECHNICAL REVIEW COMMENTS ON
“REVISED REMEDIAL INVESTIGATION REPORT”
PLAINWELL MILL SITE, OPERABLE UNIT 7 OF
ALLIED PAPER/PORTAGE CREEK/KALAMAZOO RIVER SITE
PLAINWELL, ALLEGAN COUNTY, MICHIGAN**

Under Contract No. EP-S5-06-02, Work Assignment No. 141-RSBD-059B, SulTRAC was requested by the U.S. Environmental Protection Agency (EPA) to review the revised remedial investigation (RI) report as part of its oversight activities for the Plainwell Mill Site located in Plainwell, Allegan County, Michigan. The RI document is dated July 10, 2012, and was prepared by Conestoga-Rovers & Associates, Inc. (CRA), for Weyerhaeuser Company (Weyerhaeuser), the responsible party for the site, as required by the Consent Decree. SulTRAC reviewed the document to assess its technical adequacy because CRA had revised its RI report again (having discovered some calculation errors in its human health risk assessment included as part of the revised RI Report dated April 20, 2012). SulTRAC previously submitted review comments to EPA on May 24, 2012. SulTRAC’s initial RI Report revision review comments still apply, in addition to the new review comments listed below on the most recent revision.

SulTRAC’s general and specific review comments on the document are presented below. The comments refer to specific sections, pages, and paragraphs of the report. The first complete paragraph on each page is identified as “Paragraph 1.” An incomplete paragraph at the top of a page (one that carries over from the previous page) is identified as “Paragraph 0.”

GENERAL COMMENTS

1. After completion of the RI field activities, the Michigan Department of Transportation (MDOT) installed two sewer lines through portions of the site. The RI report must be revised to discuss any impacts of the MDOT sewer project on conclusions pertaining to the RI. For example, the report should include an evaluation of the final Prince Street and Church Street sewer alignments and discuss whether contamination present at depth possibly was disturbed and brought to the surface, which could have changed site conditions. Moreover, MDOT drainage outlet details indicate that the planned sewer pipe bottom elevations for the Prince Street and Church Street sewers ranged from about 715 to 712 feet above mean sea level (msl). Groundwater elevation maps presented in the RI report indicate that groundwater elevations measured in January and February 2010 ranged from about 711 to 709 feet above msl near the Prince Street sewer, and about 712.4 to 712.2 feet above msl near the Church Street sewer.

2. The revised RI report (and subsequent Revised RI report addendum to be submitted upon completion of additional activities) should include an evaluation of possible impacts of the new sewer lines on groundwater flow.
3. During the MDOT sewer installation project, paper residual seams were observed in the subsurface in the area of the former wastewater treatment lagoons. The RI report should be revised to discuss how depth and extent of these observed paper residuals relate to the current understanding discussed in the RI report.
4. The draft RI report divided the site into investigation areas 1, 2, 3, 3A, 3B, 3C, 3D, and 3E. The revised RI report (and risk assessments) refers to 11 new redevelopment areas. For additional clarity, previously designated investigation areas (Areas 1, 2, 3, 3A, 3B, 3C, 3D, and 3E) should be superimposed over the 11 new redevelopment areas on Figure 1.2, because the relationship between the designations is discussed in the revised RI report.
5. The risk assessment conclusions in the executive summary are organized by exposure area. The conclusions are presented as lengthy narrative summaries; some summaries take up between 0.5 and 1.5 pages. This type of presentation makes it difficult for the reader to follow along and to distinguish details. An alternate type of presentation—such as an introductory or summary portion of text, followed by a series of bullets (and, as necessary, sub-bullets)—would ease the reader’s task in these regards. The risk assessment conclusions in the executive summary should be revised accordingly.

SPECIFIC COMMENTS

1. **Executive Summary, Page vii, Paragraph 1.** The text discusses groundwater in the downgradient direction of the coal tunnel at well MW-2. As acknowledged in the work plan for additional RI activities that CRA will conduct for Weyerhaeuser, MW-2 is not located downgradient of the coal tunnel; therefore, a new well, MW-22, has been proposed. The text should be revised to acknowledge that MW-2 is not downgradient of the coal tunnel.
2. **Executive Summary, Page ix, Paragraph 2.** This section of the executive summary presents receptor-specific risks at Residential Area 2. The third sentence states that the calculated cancer risk for the resident exceeds 1E-04 for indoor air inhalation (from soil). However, the risk driver for this exposure pathway is not identified. The preceding discussion could imply to the reader that this indoor air risk is posed by arsenic. This interpretation would be incorrect. The indoor

air risk to the resident receptor through inhalation of indoor air is driven by potential exposure to benzene. The executive summary should be revised to clarify this point.

3. **Section 5.2.1.3.2.2, Page 54, Paragraph 2.** The text should be revised to state that MW-2 is not downgradient of the coal tunnel (see specific comment 1).
4. **Section 5.3.2 Pages 147 and 148.** The heading for the second column in the table should be revised to “sample date” rather than “sample depth.”
5. **Section 8.1.5.3, Page 242, Paragraph 1.** This paragraph summarizes receptor-specific total risks and hazards for Commercial Area 1. The table references for groundwater exposure by construction workers appear to be incorrect; the table references are to Tables I.5.23.CT and I.5.23.RME. The correct table references are Tables I.8.23.CT and I.8.23.RME. The in-text table should be revised accordingly.
6. **Section 8.1.5.6.7, Page 286, Paragraph 1.** This paragraph summarizes risk and hazard drivers regarding the future commercial worker under the “disturbed” soil exposure scenario at Mixed Residential/Commercial Area 2. The total RME hazard quotient (HQ) of Contributing COPCs Across all Media is listed as 1.6. According to the table referenced (Table I.7.48.RME), the correct total HQ is 1.5. The in-text table should be corrected.
7. **Section 10.1.1.8, Page 339, Paragraph 3.** The text should be revised to state that MW-2 is not downgradient of the coal tunnel (see specific comment no. 1).
8. **Section 10.1.3, Pages 341 through 349.** Section 10.1.3 summarizes the human health risk assessment. The discussion is organized by receptor and uses lengthy narrative bullet items. Use of a lengthy narrative style makes it difficult for the reader to identify the key points in each item. This problem is compounded because the narrative items include no references to tables where the specifics can be verified. Section 10.1.3 should be revised to present the material in a more reader-friendly format, with key table references supplied to help readers verify stated information, and to inform them about where to look for additional information (particularly those readers focusing on the summary discussion and possibly less familiar with the detailed risk discussions of earlier sections).

9. **Section 10.1.3, Page 347, Paragraph 2.** This paragraph summarizes risk and hazard information regarding the commercial worker at the Mixed Residential/Commercial Area 2. The text states that the major contributors to cumulative risks under the “disturbed” soil scenario include indeno(1,2,3-cd)pyrene. According to Table I.7.48.RME, the list of major contributors does not include indeno(1,2,3-cd)pyrene. Section 10.1.3 should be revised accordingly. (Note: this same comment applies to Section 10.2.1 [see Page 362]; that section should likewise be corrected).
10. **Appendix E.** Previously, on May 24, 2012, SulTRAC provided comments to EPA on CRA’s first RI Report revision dated April 20, 2012. Among these comments was reference to missing information in Appendix E that CRA stated would be included in the revision. SulTRAC’s original comments still apply; however, in the revision of the RI Report dated July 10, 2012, Appendix E is absent. Appendix E should be included in the most recent revision.